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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,015	08/07/2001	Tsuyoshi Kimura	450100-03387	1973
20999	7590	11/30/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			SENI, BEHROOZ M	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/924,015

Applicant(s)

KIMURA, TSUYOSHI

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-9,11-16,18,19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9,11-16,18,19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments (amendment and remarks, filed 9/9/2005) with respect to claims 1 – 3, 5 – 9, 11 – 16, 18 – 19 and 21 - 23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant amends claims 1, 9, 15, 19, and canceled claims 4, 10, 17, and 20.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3, 5 – 9, 11 – 16, 18 – 19 and 21 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 2001/0043751) in view of Katata et al (US 6,088,061).

Regarding claims 1 and 15, Takahashi '751 discloses, an image processing apparatus and method (fig. 12) comprising: specific hierarchy encoding means (1, 130, para 0224) for encoding a specific hierarchy image data item, among image data items in respective hierarchies (para 0223-0224, i.e. hierarchical encoding involves encoding image data having respective hierarchies) produced by dividing image data to be encoded (para 0226), by performing an encoding process for an intra picture (0225 i.e. I frame), or an encoding process for a non-intra picture (para 0228, 0235 i.e. P or B-

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frame), and control means for controlling the encoding process (29a, para 0229, 0235) and when the encoding process for the intra picture is to be performed (fig. 12, page 15, para 0225) the specific hierarchy encoding means performs the encoding process for the intra picture (Sg) after subtracting (10a) reference data (Pg1) having a value other than Zero from the specific hierarchy image data item (i.e. intra data Sg being encoded after subtraction of reference data Pg1 that is not zero).

Takahashi '751 reference is silence in regards to, average pixel value detecting means for detecting an average pixel value of the specific hierarchy image data item as reference data.

However, such features are well known and used in the prior art of video encoding/decoding as evidenced by Katata'061 (i.e. col. 27, lines 14 – 25) which calculates the average pixel values with respect to the mean value of the pixel, and compare the difference with a specific (reference) value.

Taking the combined teaching of Takahashi and Katata as a whole, it would have been obvious to improve the encoding process of Takahashi by calculating the average pixel value and comparison of the difference with the specific (reference) value, and thereby making it possible to correctly change over the coding mode from the predictive (inter-frame) coding to the intra-frame coding as suggested by Katata (col. 27, lines 21 – 22).

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Regarding claims 2 – 3, 11 and 16, combination of Takahashi and Katata teaches, multiplexing means for multiplexing (fig. 14, para 0237 of Takahashi) and storage means for storing the reference data (fig. 12: 16, 26 of Takahashi).

Regarding claims 5, 12, 18 and 21, combination of Takahashi and Katata teaches, image data items in hierarchies include a basic hierarchy image data item and a higher hierarchy image data item obtained by subtracting the basic hierarchy image from the image data to be encoded, (i.e. fig. 12, base “low resolution” and enhancement “high resolution” Takahashi).

Regarding claim 6, combination of Takahashi and Katata teaches, higher hierarchy encoding means for encoding the higher hierarchy image data item by performing the encoding process ..... (i.e. fig. 12 of Takahashi) and when the encoding process for the intra picture is to be performed, the higher hierarchy encoding means performs the encoding process for the intra picture without subtracting the reference data from the specific hierarchy image data, (i.e. page 2, para 0020 of Takahashi).

Regarding claim 7, the limitations, division means for dividing the image data to be encoded to produce the image data item in hierarchies, would have been necessitated by the process of hierarchical image encoding and decoding.

Regarding claim 9, combination of Takahashi and Katata teaches, separation means for separating specific hierarchy encoded data item and reference data from a stream in which the specific hierarchy encoded data item and the reference data are multiplexed ..... (i.e. fig. 12, item 31a of Takahashi, fig. 12, item 10 of Katata) and determination means for performing an encoding process for an intra picture or an

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encoding process for an non-intra picture ..... (i.e. fig. 12, 29a of Takahashi) and decoding means ..... (i.e. fig. 8 of Takahashi and fig. 12 of Katata).

Regarding claim 8, the limitation as claimed, have been analyzed and rejected with respect to claim 1.

Regarding claims 13 and 22, the limitations claimed are substantially similar to claim 6, except is the reverse (decoding) process of the hierarchy image encoding process. Therefore, the ground for rejecting claim 6 also applies here, since (fig. 15 of Takahashi) is a reverse/decoding process of the hierarchy image encoding process of fig. 12.

Regarding claims 14 and 23, combination of Takahashi and Katata teaches, decoding means for reverse processing of hierarchical encoding of the image data in claim 12, (i.e. fig. 15 of Takahashi).

Regarding claim 19, the limitations claimed, have been analyzed and rejected with respect to claim 9.

#### **Contact**

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(571) 273-8300**

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

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Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-6000.

B. M. S.

11/26/05

VU LE  
PRIMARY EXAMINER